Title (en)

ELECTRICAL CAPACITOR AS A CHIP ELEMENT

Publication

EP 0162149 B1 19890719 (DE)

Application

EP 84115953 A 19841220

Priority

DE 3412492 A 19840403

Abstract (en)

[origin: US4617609A] An electric capacitor which can be soldered to a printed circuit board in the manner of a chip component, without damaging the capacitor, has capacitor plates with electrodes therebetween arranged in a stack, the electrodes alternatingly terminating at opposite end faces of the capacitor, at which a metal plating is applied, with a portion of respective bands of flexible metal being disposed adjacent each metal plating forming current leads, with the portion of the band adjacent the metal plating being encapsulated with the capacitor, and a remaining portion of each band projecting outside of the encapsulation and being bent at least partially around exterior sides of the encapsulation and forming soldering surfaces. A method for manufacturing such a capacitor includes the steps of cutting spaced recesses in a metal plate for producing a number of continuous parallel bands extending between two margins of the plate, cutting and bending those bands and inserting a stacked capacitor with the metal platings between the cut ends of the band, encapsulating the capacitor and the portions of the bands adjacent thereto, and severing the opposite ends of the bands from the plate margins and bending the severed portions around a part of the exterior of the encapsulation.

IPC 1-7

H01G 1/035; H01G 1/10; H01G 1/14

IPC 8 full level

H01G 2/06 (2006.01); **H01G 4/00** (2006.01); **H01G 4/252** (2006.01); **H01G 9/004** (2006.01); **H05K 3/34** (2006.01)

CPC (source: EP US)

H01G 2/06 (2013.01 - EP US); **H01G 2/065** (2013.01 - EP US); **H05K 3/3442** (2013.01 - EP US); H01F 2027/295 (2013.01 - EP US); H05K 2201/10636 (2013.01 - EP US); H05K 2201/10916 (2013.01 - EP US); Y02P 70/50 (2015.11 - EP US); Y10T 29/435 (2015.01 - EP US)

Cited by

EP0206584A1; EP0289934A1; DE19822511B4; US4959505A; EP0271120A1; EP0338490A1; US5041696A; EP0375505A1; US4933811A; FR2640825A1; EP0375519A1; FR2641905A1; US5060117A; EP0205360A1; FR2581827A1; US4715118A; EP0130386B1

Designated contracting state (EPC)

AT CH DE FR GB IT LI SE

DOCDB simple family (publication)

US 4617609 A 19861014; AT E44840 T1 19890815; BR 8501541 A 19851126; DE 3412492 A1 19851003; DE 3479067 D1 19890824; EP 0162149 A1 19851127; EP 0162149 B1 19890719; ES 541880 A0 19861216; ES 8702731 A1 19861216; JP S60225414 A 19851109

DOCDB simple family (application)

US 70759185 A 19850304; AT 84115953 T 19841220; BR 8501541 A 19850402; DE 3412492 A 19840403; DE 3479067 T 19841220; EP 84115953 A 19841220; ES 541880 A 19850402; JP 6986085 A 19850402